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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,692	08/05/2003	Paul Burnett	PRD-0023NP	7576

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EXAMINER

SRIVASTAVA, KAILASH C

ART UNIT	PAPER NUMBER
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1657

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,692

Applicant(s)

BURNETT ET AL.

Examiner

Dr. Kailash C. Srivastava

Art Unit

1657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 1,2,14-16,19,20 and 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-13, 17-18 & 21-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's responsive amendment filed 28 August 2006 in response to Office action mailed 26 May 2006 is acknowledged and entered.
2. The Art Unit Location for your application under prosecution at the United States Patent and Trademark Office (i.e., USPTO) has been changed to Art Unit 1657. To aid in correlating any papers for this application (i.e., 10/634,692), all further correspondence regarding this application should be directed to Examiner Kailash C. Srivastava in Art Unit 1657.
3. In view of amendments and remarks filed 28 August 2006 following objections in Office action mailed 26 May 2006 are withdrawn:
 - The objection to specification for failure to properly recite the reference to claimed priority documents.
4. Following rejections in Office action mailed 26 May 2006 are withdrawn in view of amendments and remarks filed 28 August 2006:
 - Rejections to Claims 3-13, 17-18 and 21-33 under 35 U.S.C. § 112, second Paragraph.

Claims Status

5. Claims 1-34 are pending.
6. Claims 1-2, 14-16, 19-20 and 34 have been withdrawn as non-elected Claims in response to an election/ restriction requirement.
7. Claim 3 has been amended.
8. Claims 3-13, 17-18 and 21-33 are examined on merit

Claim Rejections - 35 U.S.C. § 103

9. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR §1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

11. Claims 4-13, 17-18 and 21-33 are rejected under 35 U.S.C. § 103 (a) as obvious over combined teachings from Wong et al. (U.S. Patent 5,843,741) in view of Casnig (U.S. Patent 5,134,070)

In response to the rejection cited above, applicant argues that, “the claimed invention is drawn to exposing the cell to repetitive electric pulse supplied by the transparent electrode and a second electrode of opposing polarity, wherein said repetitive electric pulses are of about 250 to about 1,000 s duration and about 1-100 pulses/s and about 2 to about 120 V amplitude, and produce a controlled change in a physiologic response of the cell”. Applicants further argue, as disclosed in the present specification, the claimed method involves the optimization of the electrical stimulation to elicit a desired response in the stimulated cell and to avoid killing or overheating of the cell”

The references of record explicitly/intrinsically teach a method to determine a compound eliciting a permanent change in cellular physiology upon polypyrrole on indium tin oxide being subjected to electric impulses because attachment and spreading of the comassie brilliant blue stained aortic epithelial cells was demonstrated in photmicrographs. Furthermore, cells were pulsed and the resultant effect were observed as retraction of cells. In these experiments cells were not killed. Since these experiments were performed with Cyclic voltametry, intrinsically

cells were repeatedly subjected to pulsed electric field in -25V or +0.4 and -1.0 V at 50 mV/sec (See for e.g., Wong et al., US Patent 5843,741, Column, 14. Lines 48-52; Column 15, Line 30 to Column 16, Line 59 and Casnig, U.S. Patent 5,134, 070, Abstract, Lines 1-13). Thus, the prior art references teach the claimed invention according to same method steps and applying the same component/compositions as instantly claimed.

Regarding applicants' arguments that the instantly disclosed specification "involves the optimization of the electrical stimulation to elicit a desired response in the stimulated cell and to avoid killing or overheating of the cell", reminded that the invention is the subject matter defined by the claims, and the limitations of the specification are not read in to the claims where no express statement of that limitations is included in the claims, (see *In re Priest*, 199 USPQ 11). Also note that, Furthermore, the 35 U.S.C. §103 statute does not require that the prior art identically disclose or describe Applicants' invention but rather that no patent should be obtained if the subject matter as a whole would have been obvious to persons having ordinary skill in this art at the time the invention was made. Moreover, even if each of the Examiner-cited references by themselves does not teach every component as claimed in the claims under prosecution in the instant application, these references are not relied upon exclusively but in combination. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art at the time the invention was made. See *In re Keller* 642. F. 2d 413, 208 USPQ 871 (CCPA 1981). Furthermore, the 35 U.S.C. §103 statute does not require that the prior art identically disclose or describe Applicants' invention but rather that no patent should be obtained if the subject matter as a whole would have been obvious to persons having ordinary skill in this art at the time the invention was made.

Applicant's arguments regarding the rejections under 35 U.S.C. §103(a) have been fully and carefully considered but are not persuasive for the reasons of record at pages 4-7 of the Office Action mailed 26 May 2006 and for additional reasons discussed above in item 11.

12. In response to applicants' arguments against the references individually, one cannot show non-obviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, those reasons are cited at pages 4-7 of the Office Action mailed 26 May 2006 and for additional reasons discussed above in item 11. Furthermore, a rejection under 35 U.S.C. § 103 (a) based upon the combination of references is not deficient solely because the references are combined based upon a reason or technical consideration which is different from that which resulted in the claimed invention (*Ex parte Raychem Corp.*, 17 U.S.P.Q. 2d 1417).

CONCLUSION

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR §1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR §1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. For the aforementioned reasons, no Claims are allowed.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kailash C. Srivastava whose telephone number is (571)

272-0923. The examiner can normally be reached on Monday to Thursday from 7:30 A.M. to 6:00 P.M. (Eastern Standard or Daylight Savings Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Jon Weber can be reached at (571)-272-0925 Monday through Thursday 7:30 A.M. to 6:00 P.M. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding may be obtained from the Patent Application Information Retrieval (i.e., PAIR) system. Status information for the published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (i.e., EBC) at: (866)-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Kailash C. Srivastava, Ph.D.

Patent Examiner

Art Unit 1657

(571) 272-0923

November 13, 2006


DAVID M. NAFF
PRIMARY EXAMINER
ART UNIT 128/451